

PATIENT INFORMATION

First name		MI	Last name		Date of birth (MM/DD/YYYY)	If patient is deceased Date of death:	
Sex assigned at birth ☐ Female ☐ Male	Gender (if differs from sex assigned at birth) ☐ Man ☐ Non-binary ☐ Woman ☐ Self-described: _____			Race/Ethnicity (select all that apply): ☐ Ashkenazi Jewish ☐ Asian ☐ Black ☐ French Canadian ☐ Hispanic ☐ Native American ☐ Pacific Islander ☐ Sephardic Jewish ☐ White ☐ Other: _____			
Patient ID (MRN)		Email address (billing and report access after clinician releases)			Mobile Phone (patient consents to receive texts from the laboratory)		
Address				City	State/Prov	Zip/Postal code	Country

Ship a buccal swab kit to this patient (to request kit shipment, submit this completed form to Client Services via fax **415-276-4164** or email clientservices@invitae.com)

☐ Ship kit to address above ☐ Ship kit to alternate address: _____

INSURANCE INFORMATION (Provide only if applicable. Attach front and back of insurance card, clinical notes and medical records. Insurance is not accepted for patients outside the US.)

Policyholder name		Primary insurance company name		Primary member ID #	Primary insurance phone	Prior-authorization #
Patient relationship to policyholder ☐ Self ☐ Spouse ☐ Child ☐ Other: _____		Secondary insurance company name		Secondary member ID #	Secondary insurance phone	Prior-authorization #

PROVIDER INFORMATION

Organization name		Phone		Fax	
Address		City	State/Prov	Zip/Postal code	Country

Primary clinical contact name (if different from ordering provider) _____ NPI _____ Email address (for report access) _____

Ordering provider (Pre-populate your provider list below. For each order, indicate **one** ordering provider by marking the checkbox before the name)

Name	NPI	Email address (for report access)	Name	NPI	Email address (for report access)
☐ _____	_____	_____	☐ _____	_____	_____
☐ _____	_____	_____	☐ _____	_____	_____
☐ _____	_____	_____	☐ _____	_____	_____

Additional clinical or laboratory contacts (optional) ☐ Share this order with the primary clinical contact's default clinical team (manage team online at [invitae.com/signin](https://www.invitae.com/signin))

Name	Email address (for report access)	Name	Email address (for report access)
_____	_____	_____	_____

NEURODEVELOPMENTAL DISORDERS PACKAGE

The most common genetic tests recommended by the American Academy of Pediatrics for patients with intellectual disability, autism, and global developmental delay can be ordered concurrently or individually. Choose to order any combination of the following:

- ☐ 728434 Invitae Neurodevelopmental Disorders Panel (241 genes total)
Gene list at [invitae.com/NDD-panel](https://www.invitae.com/NDD-panel)
- ☐ 56033 Invitae Chromosomal Microarray Analysis
- ☐ 56022 Fragile X - Related Disorders

Specimen type*: If **one** test is ordered above:

Blood (4-mL purple EDTA, 1 tube) **-OR-** Buccal swabs (OCD-100, 2 devices)

If **two or more** tests are ordered above:

Blood (4-mL purple EDTA, 2 tubes) **-OR-** Buccal swabs (OCD-100, 4 devices)

Specimen collection date (MM/DD/YYYY):

Reason for testing and ICD-10 codes (select all that apply):

- ☐ F84.0 Autistic disorder
- ☐ F80.9 Development disorder of speech & language
- ☐ F82 Specific developmental disorder of motor function
- ☐ R62.0 Delayed milestone in childhood
- ☐ F81.9 Developmental disorder of scholastic skills
- Intellectual disability: ☐ F70 Mild ☐ F71 Moderate ☐ F72 Severe
- ☐ Other reason and ICD-10: _____

Billing selection (select one): ☐ Self-pay ☐ Institutional ☐ Insurance

FAMILIAL CHROMOSOMAL MICROARRAY ANALYSIS (CMA)

This test is intended to evaluate for known familial CNVs to aid in determining inheritance pattern, clarify reproductive risks, and/or identify other family members with the same familial CNV(s).

☐ 56034 Invitae Familial Chromosomal Microarray

Specimen type*: Blood (4-mL purple EDTA) **-OR-** Buccal swabs (OCD-100, 2 devices)

Specimen collection date (MM/DD/YYYY):

Proband (patient whose name was on previous testing report) information:

Proband Full Name: _____

Proband DOB: ____ / ____ / ____

This patient's relationship to proband:

☐ Parent ☐ Sibling ☐ Other family member: _____

Proband's test result: _____

Was the proband tested at Labcorp Genetics?

- ☐ Yes, Invitae order ID: _____
- ☐ No (attach report and call Labcorp Genetics to confirm testing)

Billing selection (select one):

- ☐ Self-pay ☐ Institutional ☐ Insurance (ICD-10 code(s) required):
- ☐ Z82.79 Family history of a chromosome abnormality
- ☐ Other ICD-10: _____

**We cannot routinely accept specimens for constitutional CMA from patients with active hematological malignancy, history of allogeneic bone marrow/stem cell transplants, or within 2 weeks of blood transfusion or 120 days of chemotherapy/radiation. Contact the laboratory prior to specimen submission to request approval.*

Invitae is now part of Labcorp Genetics. By signing this form, I acknowledge that the patient (or the individual authorized to make decisions for the patient) has been supplied information regarding and consented to undergo genetic testing, as set forth in Labcorp Genetics' Informed Consent for Genetic Testing ([invitae.com/forms](https://www.invitae.com/forms)). I acknowledge that the patient has agreed that (1) for orders originating outside the US, the patient's personal information and specimen will be transferred to and processed in the US (2) Labcorp Genetics may notify the patient of clinical updates related to genetic test results (in consultation with the ordering provider) (3) Labcorp Genetics and its designees may release information concerning testing to the patient's insurer (if billing to insurance) (4) the patient is responsible for any amount the insurer does not pay or pays directly to the patient and the patient has agreed to make or pass through such payment for services rendered. I attest that I am authorized under applicable law to order this test. If required by the patient's insurer, I attest that I offered pre-test genetic counseling to the patient or authorized Labcorp Genetics to assist the patient in obtaining pre-test genetic counseling from a third party. I agree to the transfer of information from this TRF to a letter of medical necessity and/or other documentation using my name as the signature. For US ordering providers only: I consent and direct Labcorp Genetics to share my contact information with third parties who may contact me directly in connection with patient results (opt out via online portal). For California providers only: I have the right to opt-out of certain uses of my data, and additional rights as detailed in Labcorp Genetics' privacy policy ([invitae.com/privacy/privacy-policy](https://www.invitae.com/privacy/privacy-policy)). For Montana providers only: I agree to keep on file and make available to Labcorp Genetics, upon request, a copy of the consent form signed by the patient. If I am a delegate, I confirm I have authorization to (1) agree to all of the above and (2) sign this form and any supporting documents on behalf of the ordering provider.

Medical professional or delegate signature (required)

Date (MM/DD/YYYY)

REASONS FOR TESTING
PERSONAL HISTORY

Is/was this patient affected or symptomatic[†]? ☐ Yes ☐ No If yes, describe briefly. Complete checklist below and attach clinical notes.

Age at diagnosis: _____

[†]Symptomatic means the patient has features or signs known or suspected to be related to the genetic testing being ordered and could include findings on physical examination, laboratory tests, or imaging.

Is there a hematological malignancy in this patient (current or history of)? ☐ Yes ☐ No

Has this patient had genetic testing before? ☐ Yes ☐ No If yes, write test results and attach the report.

FAMILY HISTORY

Is there a family history of disease for which the patient is being tested? ☐ Yes ☐ No If yes, describe below and attach pedigree and/or clinical notes.

Relative's relationship to this patient	Maternal or paternal	Diagnosed condition	Age at diagnosis

CLINICAL INFORMATION CHECKLIST

Complete this **required** clinical information checklist and/or attach a clinic note if patient is/was affected or symptomatic.
IMPORTANT: Clinical information is essential for insurance billing and variant interpretation.

Clinical diagnosis

Cardiac

☐ Yes ☐ No ☐ Unknown

- ☐ Aortic root dilation
- ☐ Arrhythmia
- ☐ Atrial septal defect
- ☐ Cardiomyopathy – type: _____
- ☐ Coarctation of aorta
- ☐ Heart murmur
- ☐ Heterotaxy
- ☐ Hypertension
- ☐ Patent ductus arteriosus
- ☐ Tetralogy of Fallot
- ☐ Ventricular septal defect
- ☐ Other: _____

Craniofacial

☐ Yes ☐ No ☐ Unknown

- ☐ Abnormal facial shape
- ☐ Cleft lip
- ☐ Cleft palate
- ☐ Craniosynostosis
- ☐ Downslanted palpebral fissures
- ☐ Epicanthus
- ☐ External ear malformation
- ☐ Facial asymmetry
- ☐ Frontal bossing
- ☐ High palate
- ☐ Hypertelorism
- ☐ Low set ears
- ☐ Macrocephaly
- ☐ Microcephaly
- ☐ Micrognathia
- ☐ Retrognathia
- ☐ Short neck
- ☐ Synophrys
- ☐ Wide nasal bridge
- ☐ Other: _____

Developmental/Behavioral

☐ Yes ☐ No ☐ Unknown

- ☐ Absent speech
- ☐ Attention deficit hyperactivity disorder
- ☐ Autistic behavior
- ☐ Behavioral abnormality
- ☐ Delayed fine motor development
- ☐ Delayed gross motor development
- ☐ Delayed speech & language development
- ☐ Developmental regression
- ☐ Global developmental delay
- ☐ Hyperactivity
- ☐ Intellectual disability
- ☐ Obsessive compulsive disorder
- ☐ Specific learning disability
- ☐ Stereotypy
- ☐ Other: _____

Endocrine

☐ Yes ☐ No ☐ Unknown

- ☐ Abnormality of adrenal glands
- ☐ Amenorrhea
- ☐ BMI: _____
- ☐ Delayed puberty
- ☐ Diabetes insipidus/mellitus
- ☐ Elevated hemoglobin A1c
- ☐ Goiter
- ☐ Hypercalcemia
- ☐ Hyperthyroidism
- ☐ Hypophosphatemia
- ☐ Hypothyroidism
- ☐ Low alkaline phosphatase
- ☐ MODY – age of onset: _____
- ☐ Pancreatic islet autoantibody negativity
- ☐ Rickets
- ☐ Other: _____

Eye/Vision Abnormalities

☐ Yes ☐ No ☐ Unknown

- ☐ Aniridia
- ☐ Anophthalmia
- ☐ Blue sclerae
- ☐ Cataracts
- ☐ Central vision loss
- ☐ Coloboma
- ☐ Cortical visual impairment
- ☐ Ectopia lentis
- ☐ External ophthalmoplegia
- ☐ Macular dystrophy
- ☐ Microphthalmia
- ☐ Myopia
- ☐ Night blindness
- ☐ Nystagmus
- ☐ Peripheral vision loss
- ☐ Photophobia
- ☐ Ptosis
- ☐ Retinal dystrophy
- ☐ Retinitis Pigmentosa
- ☐ Strabismus
- ☐ Other: _____

Gastrointestinal

☐ Yes ☐ No ☐ Unknown

- ☐ Cholestasis
- ☐ Congenital diaphragmatic hernia
- ☐ Constipation
- ☐ Diarrhea
- ☐ Duodenal stenosis/atresia
- ☐ Exocrine pancreatic insufficiency
- ☐ Failure to thrive
- ☐ Feeding difficulties
- ☐ Gastroesophageal reflux
- ☐ Gastroschisis
- ☐ Hepatomegaly/Splenomegaly
- ☐ Hepatic fibrosis
- ☐ Hirschsprung's disease
- ☐ Inflammatory bowel disease
- ☐ Intestinal perforation

- ☐ Intrahepatic biliary atresia
- ☐ Laryngomalacia
- ☐ Nausea/vomiting
- ☐ Pancreatitis
- ☐ Pyloric stenosis
- ☐ Tracheoesophageal fistula
- ☐ Other: _____

Genitourinary

☐ Yes ☐ No ☐ Unknown

- ☐ Abnormal renal biopsy: _____
- ☐ Abnormal urine analysis: _____
- ☐ Ambiguous genitalia
- ☐ Chronic kidney disease
- ☐ Congenital malformation of reproductive organs
- ☐ Cryptorchidism
- ☐ Hydronephrosis
- ☐ Hypospadias
- ☐ Micropenis
- ☐ Nephrocalcinosis
- ☐ Nephrotic syndrome
- ☐ Nephrolithiasis
- ☐ Polycystic kidney disease
- ☐ Renal agenesis
- ☐ Renal dysplasia
- ☐ Renal insufficiency
- ☐ Renal tubular dysfunction/acidosis
- ☐ Other: _____

(continues)

CONTINUE TO NEXT PAGE TO COMPLETE REASONS FOR TESTING

CLINICAL INFORMATION CHECKLIST
Hearing Impairment
☐ Yes ☐ No ☐ Unknown

- ☐ Conductive hearing impairment:
☐ bilateral ☐ unilateral
- ☐ Sensorineural hearing impairment:
☐ bilateral ☐ unilateral
- ☐ Hearing impairment, mixed or unknown:
☐ bilateral ☐ unilateral
- ☐ Other: _____

Hematological or Immunological
☐ Yes ☐ No ☐ Unknown

- ☐ Anemia
- ☐ Bone marrow hypocellularity
- ☐ Immunodeficiency
- ☐ Neutropenia
- ☐ Pancytopenia
- ☐ Recurrent infections
- ☐ Recurrent otitis media
- ☐ Thrombocytopenia
- ☐ Thromboembolism
- ☐ Other: _____

Musculoskeletal
☐ Yes ☐ No ☐ Unknown

- ☐ Abnormal connective tissue
- ☐ Abnormality of bone mineral density
- ☐ Abnormality of the arm – specify: _____
- ☐ Abnormality of the hand – specify: _____
- ☐ Abnormality of the ribs
- ☐ Bowing of the long bones
- ☐ Bruising susceptibility
- ☐ Recurrent fractures
- ☐ Hemihypertrophy
- ☐ Hyperostosis
- ☐ Hypertonia
- ☐ Hypotonia
- ☐ Kyphosis
- ☐ Joint contractures
- ☐ Overgrowth %ile: _____
- ☐ Pectus excavatum
- ☐ Scoliosis
- ☐ Short stature
- ☐ Skeletal dysplasia
- ☐ Tall stature
- ☐ Thoracic hypoplasia
- ☐ Vertebral abnormalities
- ☐ Other: _____

Neurological
☐ Yes ☐ No ☐ Unknown

- ☐ Anosmia, congenital
- ☐ Ataxia
- ☐ Cerebral palsy
- ☐ Dystonia
- ☐ Encephalopathy
- ☐ Epileptic encephalopathy
- ☐ Headaches
- ☐ Hemiplegic migraine
- ☐ Hyperreflexia
- ☐ Peripheral neuropathy
- ☐ Reduced tendon reflexes
- ☐ Seizures – type: _____
- ☐ Sensory neuropathy
- ☐ Spasticity
- ☐ Stroke-like episode(s)
- ☐ Other: _____

Pre/Perinatal history
☐ Yes ☐ No ☐ Unknown

- ☐ Cystic hygroma
- ☐ Increased nuchal translucency
- ☐ Intrauterine growth restriction
- ☐ Nonimmune hydrops fetalis
- ☐ Multiple prenatal fractures
- ☐ Oligohydramnios
- ☐ Omphalocele
- ☐ Polyhydramnios
- ☐ Other: _____

Respiratory
☐ Yes ☐ No ☐ Unknown

- ☐ Asthma
- ☐ Bronchiectasis
- ☐ Pneumothorax
- ☐ Pulmonary fibrosis
- ☐ Recurrent upper respiratory infections
- ☐ Respiratory distress/insufficiency
- ☐ Other: _____

Skin/Hair
☐ Yes ☐ No ☐ Unknown

- ☐ Abnormality of hair – specify: _____
- ☐ Abnormality of nail
- ☐ Alopecia
- ☐ Angiokeratoma
- ☐ Blistering of the skin
- ☐ Café-au-lait macules – count: _____
- ☐ Eczema
- ☐ Hyperextensible skin
- ☐ Hyperpigmentation of the skin
- ☐ Hypertrichosis
- ☐ Hypopigmentation of the skin
- ☐ Ichthyosis
- ☐ Recurrent skin infections
- ☐ Velvety skin (soft skin)
- ☐ Xanthomatosis
- ☐ Other: _____

Structural Brain Abnormalities
☐ Yes ☐ No ☐ Unknown

- ☐ Abnormal/delayed myelination
- ☐ Abnormality of basal ganglia
- ☐ Abnormality of brainstem
- ☐ Abnormality of the corpus callosum
- ☐ Aplasia/hypoplasia of cerebellum
- ☐ Arnold Chiari malformation
- ☐ Brain atrophy
- ☐ Cerebellar atrophy
- ☐ Cortical dysplasia
- ☐ Cortical tubers
- ☐ Holoprosencephaly
- ☐ Hydrocephalus
- ☐ Hypomyelination
- ☐ Leukodystrophy
- ☐ Lissencephaly
- ☐ Molar tooth sign on MRI
- ☐ Pachygyria
- ☐ Periventricular heterotopia
- ☐ Polymicrogyria
- ☐ Pontocerebellar hypoplasia
- ☐ Subcortical band heterotopia
- ☐ Ventriculomegaly
- ☐ Other: _____

Vascular System
☐ Yes ☐ No ☐ Unknown

- ☐ Aneurysm
- ☐ Arterial calcification
- ☐ Arterial dissection
- ☐ Arteriovenous malformation
- ☐ Lymphedema
- ☐ Stroke
- ☐ Other: _____

Imaging, metabolic, other lab results (attach lab reports/values)
Additional clinical findings