

UW Cytogenetic Services

Wisconsin State Laboratory of Hygiene

Winter 2016

Test Menu Update: Comprehensive Prenatal/Neonatal Microarray Analysis

The UW Cytogenetic Laboratory offers two prenatal microarray testing options:

890PREC: Comprehensive Prenatal/Neonatal Microarray Analysis

890PRET: Targeted Prenatal Microarray Analysis

Effective immediately, we are modifying our Comprehensive Prenatal Microarray Analysis test (890PREC) to include neonatal blood specimens. This updated test will now be known as 'Comprehensive Prenatal/Neonatal Microarray Analysis' and can still be ordered using test code 890PREC.

Recommended Uses:

Prenatal: The American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine recommend the use of chromosomal microarray analysis "in patients with a fetus with one or more major structural abnormalities identified on ultrasonographic examination and who are undergoing invasive prenatal diagnosis" and "in cases of intrauterine fetal demise or stillbirth when further cytogenetic analysis is desired."

Neonatal (less than 30 days of age or infants requiring intensive care): The American College of Medical Genetics and Genomics (ACMG) has recommended that array comparative genomic hybridization (aCGH) is used as a first-line test in the evaluation of individuals with multiple congenital anomalies, non-syndromic intellectual and developmental disability, and autism spectrum disorders. SNP Array Comparative Genomic Hybridization is used to detect large regions of homozygosity as well as gains and losses of DNA from specimens containing high quality genomic DNA.

Turnaround Time: 7-10 days

Specimen Requirements:

Prenatal

Amniotic fluid (AF): 15-25 ml

Chorionic villus (CVS): 10-30 mg tissue.

Products of conception (POC): minimum 0.3 cm cubed fresh tissue. Placental villus is the preferred tissue; kidney, lung, and/or fascia are also acceptable.

FFPE tissue or frozen tissue: The cytogenetics laboratory will attempt to work with the specimen received and will return any unused material.

Cultured cells: 3-T25 flasks, 70% confluent.

Neonatal

Blood: 2 ml in Sodium Heparin is recommended

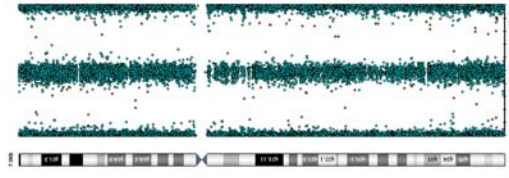
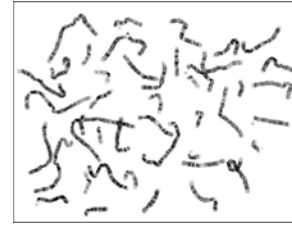
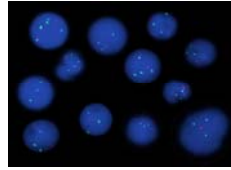
Please call our laboratory at 608-262-0402 with any questions.

UW Cytogenetic Services

465 Henry Mall
Madison, WI 543705

Phone: 608-262-0402
Fax: 608-265-7818

www.slh.wisc.edu/cytogenetics



Please submit completed Phenotype Forms!

Complete and precise clinical patient information is critical for accurate and timely microarray interpretation.

Microarray requests are often submitted with generic diagnosis codes and/or clinical information. When copy number variation and/or large regions of homozygosity are identified, our interpretation of those findings can largely depend on the clinical information we are provided.

The UW Cytogenetic and Molecular Laboratories request phenotype data collection forms be submitted with all prenatal and postnatal microarray test requests. Forms can be found on our website under the "Forms and Resources" section at <http://www.slh.wisc.edu/clinical/cytogenetics>.

Completed forms should be returned to the UW Cytogenetics Laboratory directly with the patient sample or via fax (608-262-7818).

UW Cytogenetic Services—WSLH Prenatal Chromosome Microarray Testing

UW Cytogenetic Services—WSLH Postnatal Chromosome Microarray Testing

Instructions: The accurate interpretation and reporting of genetic test results is contingent upon the reason for referral, clinical information provided, and family history. To help provide the best possible service, please check the applicable clinical information below. Please send this page with the specimen or return by fax to the WSLH Cytogenetics Laboratory (fax: 608-265-7818). If a karyotype has been performed, please note the result at the bottom of the form.

Patient Identification
 Patient Name: _____ (Last) _____ (First) Fetal gender: [] Male [] Female
 Date of Birth: _____ (mm/dd/yyyy) LMP: _____ Date of Collection: _____

Clinical Information — Check all that apply. Use additional space at the bottom of the form if needed.

Primary Indication for Testing: <input type="checkbox"/> Abnormal serum screen <input type="checkbox"/> Advanced maternal age <input type="checkbox"/> Fetal abnormality as indicated <input type="checkbox"/> None specified	<input type="checkbox"/> Craniofacial <input type="checkbox"/> Cleft lip w/ cleft palate <input type="checkbox"/> Cleft palate alone <input type="checkbox"/> Hyper/hypotelarism <input type="checkbox"/> Microcephaly <input type="checkbox"/> Microcephaly <input type="checkbox"/> LMI HC if known: _____ <input type="checkbox"/> Other: _____	<input type="checkbox"/> Gastrointestinal <input type="checkbox"/> Gastrochilus <input type="checkbox"/> Omphalocele <input type="checkbox"/> Abent stomach <input type="checkbox"/> Ectopic focus <input type="checkbox"/> Meconium ileus/anal atresia <input type="checkbox"/> Tracheoesophageal fistula <input type="checkbox"/> Other: _____
Perinatal History <input type="checkbox"/> Intrauterine growth restriction <input type="checkbox"/> Oligohydramnios <input type="checkbox"/> Polyhydramnios <input type="checkbox"/> Increased nuchal translucency (includes cystic hygroma) <input type="checkbox"/> Hydrops (unknown or infection) <input type="checkbox"/> 2 vessel cord <input type="checkbox"/> Other: _____	Pulmonary <input type="checkbox"/> CCAM/small thoracic cavity <input type="checkbox"/> Diaphragmatic hernia <input type="checkbox"/> Eventration of diaphragm <input type="checkbox"/> Pulmonary sequestration <input type="checkbox"/> Pleural effusion <input type="checkbox"/> Other: _____	Musculoskeletal <input type="checkbox"/> Contractures (arthritis/epispadias) <input type="checkbox"/> Club foot (talipes) <input type="checkbox"/> Polydactyly <input type="checkbox"/> Syndactyly <input type="checkbox"/> Clenched hands
Family HI story <input type="checkbox"/> Parents with > 2 miscarriages <input type="checkbox"/> Other relatives with similar clinical history Explain: _____	Neurological <input type="checkbox"/> NTD (myelomeningocele) <input type="checkbox"/> Agnosia of the corpus callosum <input type="checkbox"/> Dandy Walker (posterior) <input type="checkbox"/> Ventriculomegaly/hydrocephalus <input type="checkbox"/> Decreased fetal movements <input type="checkbox"/> Abnormal gyri (lissencephaly) <input type="checkbox"/> Structural brain anomaly <input type="checkbox"/> Other: _____	Neurological <input type="checkbox"/> Seizures <input type="checkbox"/> Hypotonia <input type="checkbox"/> Hypertonia <input type="checkbox"/> Central palsy <input type="checkbox"/> Encephalopathy <input type="checkbox"/> Structural brain anomaly <input type="checkbox"/> Other: _____
As a participant in the ICCO (International Collaboration for Clinical Genomic Consortium), the WSLH Cytogenetics Laboratory attributes submitted clinical information and test results to a HIPAA compliant, de-identified public database as part of the NICR's effort to improve understanding of the relationship between genetic change and clinical symptoms. Confidentiality is maintained. Patients may request to opt-out of this scientific effort by: 1) checking the box below, 2) calling the laboratory at 608-262-0402 and asking to speak with a genetic counselor, or 3) visiting our website at http://slh.wisc.edu/cytogenetics. <input type="checkbox"/> Indicate refusal for inclusion in these efforts by checking this box. If the box is not marked, data will be accepted and used. 	Growth <input type="checkbox"/> Failure to thrive <input type="checkbox"/> Overgrowth <input type="checkbox"/> Short stature <input type="checkbox"/> Other: _____	Cardiac <input type="checkbox"/> Atrial septal defect <input type="checkbox"/> Ventricular septal defect <input type="checkbox"/> Coarctation of the aorta <input type="checkbox"/> Tetralogy of Fallot <input type="checkbox"/> Other structural heart defect <input type="checkbox"/> Other cardiac abnormality <input type="checkbox"/> Other: _____
Cognitive/Developmental <input type="checkbox"/> Learning disability <input type="checkbox"/> Developmental delay <input type="checkbox"/> Gross motor delay <input type="checkbox"/> Fine motor delay <input type="checkbox"/> Speech delay <input type="checkbox"/> Intellectual disability/MR <input type="checkbox"/> Other: _____	Ocular/Facial <input type="checkbox"/> Dysmorphic facial features <input type="checkbox"/> Ear malformation <input type="checkbox"/> Cleft lip <input type="checkbox"/> Cleft palate <input type="checkbox"/> Microcephaly <input type="checkbox"/> Other: _____	Gastrointestinal <input type="checkbox"/> Gastrochilus <input type="checkbox"/> Omphalocele <input type="checkbox"/> Anal atresia <input type="checkbox"/> Tracheoesophageal fistula <input type="checkbox"/> Pyloric stenosis <input type="checkbox"/> Other: _____
Behavioral/Psychiatric <input type="checkbox"/> Autism <input type="checkbox"/> Pervasive developmental delay <input type="checkbox"/> Attention deficit hyperactivity disorder <input type="checkbox"/> Anxiety <input type="checkbox"/> Behavioral/psychiatric abnormality <input type="checkbox"/> Other: _____	Hearing/Vision <input type="checkbox"/> Hearing loss <input type="checkbox"/> Abnormality of Vision <input type="checkbox"/> Abnormality of Eye Movement <input type="checkbox"/> Other: _____	Genitourinary <input type="checkbox"/> Ambiguous genitalia <input type="checkbox"/> Hydronephrosis <input type="checkbox"/> Kidney malformation <input type="checkbox"/> Cryptorchidism <input type="checkbox"/> Hypospadias <input type="checkbox"/> Other: _____
Cutaneous <input type="checkbox"/> Hyperpigmentation <input type="checkbox"/> Hypopigmentation <input type="checkbox"/> Other: _____	Family HI story <input type="checkbox"/> Parents with > 2 miscarriages <input type="checkbox"/> Other relatives with similar clinical history Explain: _____	Other: _____

Please include any additional information not provided above (list karyotype if known).

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