



Chromosomal Microarray Analysis with **Cyto-ONE**

ONE Array for All

Chromosomal microarray (CMA) is a powerful tool for detecting copy number variants (CNVs) associated with diseases and phenotypes.

The ACMG and ACOG recommend microarray as the test of choice for the detection of Copy Number Variants—Deletions and Duplications

But

Are all microarrays equally sensitive in detecting CNVs?

&

How do you choose the right one for your patients?

High-resolution microarrays significantly improve diagnostic power

Introducing
Cyto-ONE
ONE Array for All

A **single high-resolution microarray** that will transform the realm of definitive diagnosis

About Cyto-ONE

Cyto-ONE is a high-resolution microarray-based diagnostic test that detects copy number variants of up to 200 kb across all 23 chromosomes.

Step 1	Step 2	Step 3	Step 4
Sample collection (Blood, products of conception, amniocentesis, chorionic villus sampling, Dried Blood Spot, Cord Blood and Extracted DNA)	Wet-lab assays	Bioinformatic analysis	Reporting (Review and interpretation)



What to Expect from Cyto-One

What It covers

- Full chromosomal aneuploidies
- Microdeletions and duplications of up to 200kb*
- Regions of homozygosity (ROH)
- Uniparental disomy

* Dependent on probe spacing and gene coverage



**Turnaround time:
13 to 15 days**

What It Does Not Cover

- Balanced chromosomal rearrangements
- Low-level mosaicism
- Single gene defects



How Does Cyto-One Support Your Decision-Making

- Initiating quick intervention or response in at-risk mothers including pregnancy termination
- Providing the best assistance before childbirth or the right therapeutic approach after the birth of the baby

	Cyto-ONE	Other Microarrays
SNP marker	Approx. 1,000,000 markers	7,50,000 markers
Probe spacing (Kb)-Mean/Median	5 kb	~50 kb
Backbone	~15—20 Kb	200 kb
Copy Neutral Loss of Heterozygosity (cnLOH)	<3Mb	5Mb
Failure Rate	<2%	upto 5%



When to Recommend Cyto-ONE?

It can help get early answers during both prenatal and postnatal periods.

- Recurrent pregnancy loss
- IUD (intrauterine death) and IUGR (intrauterine growth restriction)
- Presence of fetal soft markers
- Confirmatory test in positive-screen results or high-risk cases
- Add-on test for fetal chromosomal evaluation
- Presence of congenital anomalies in babies
- Evaluation of autism, intellectual disability and dysmorphism in babies/children



Why Clinicians and Parents Should Consider Cyto-ONE

- Higher detection rates and lower failure rates
- Detection of ROH (Regions Of Homozygosity)
- Prediction of the presence of an underlying recessive disorder
- Fast turnaround time for timely management

Experience. Competency. Accuracy
Choose CytoOne for timely and precise answers

MCC required for all prenatal tests



NCGM
—by Neuberg—



CAP
ACCREDITED
COLLEGE of AMERICAN PATHOLOGISTS

To know more or book the test,

Neuberg Center for Genomic Medicine (NCGM) | NCGM, Inc.(a Neuberg Diagnostics Company)
9760 Holly Springs Rd, Apex, NC 27539 | Email: info@ncmgglobal.com | CLIA No. 34D2205781

References:

1. American College of Obstetricians and Gynecologists. Microarrays and next-generation sequencing technology: the use of advanced genetic diagnostic tools in obstetrics and gynecology. ACOG Committee opinion no. 682. American College of Obstetricians and Gynecologists. Obstet Gynecol. 2016;128:e262-8.