<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Specimen</th>
<th>Room temperature</th>
<th>Refrigerated</th>
<th>Frozen</th>
<th>Method</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q025</td>
<td>ChromoTouch Chromosome SNP Microarray, Optima Products of Conception</td>
<td>Submit 5 mg (2 mg min) corneal tissue in normal saline. Give clinical history on chromosomal microarray test request form.</td>
<td>NA</td>
<td>24 hrs.</td>
<td>NA</td>
<td>Chromosome microarray using Affymetrix Optima Suite™</td>
<td>Sample Daily by 4 pm; Report in 10 days</td>
</tr>
<tr>
<td>Q024</td>
<td>ChromoTouch Chromosomal SNP Microarray, Optima Prenatal</td>
<td>Amniotic fluid: 15 mL (10 mL min) amniotic fluid in a sterile screw-capped container. Chorionic villus: 30 mg (20 mg min) chorionic villi biopsy collected aseptically in 10 mL transport medium available from UPL. Umbilical Cord blood: 4 mL (2 mL min) cord blood in 1 Lavender top (EDTA) tube. Avoid clot formation during sampling. Snp refrigerated immediately. DO NOT FREEZE. Give clinical history on microarray test request form. Consent form for Prenatal genetic testing is mandatory.</td>
<td>NA</td>
<td>24 hrs.</td>
<td>NA</td>
<td>Chromosome microarray using Affymetrix Optima Suite™</td>
<td>Sample Daily by 4 pm; Report in 10 days</td>
</tr>
<tr>
<td>Q023</td>
<td>ChromoFic, Chromosome SNP Microarray, 750K, High resolution</td>
<td>4 mL (2 mL min) whole blood in 1 lavender top (EDTA) tube. Snp refrigerated. DO NOT FREEZE. Give clinical history on GenomiX Microarray Request form.</td>
<td>NA</td>
<td>24 hrs.</td>
<td>NA</td>
<td>Affymetrix CytoScan™ 750K microarray</td>
<td>Sample Daily by 4 pm; Report in 10 days</td>
</tr>
</tbody>
</table>

Reference

The ChromoTouch SNP microarray utilizes 315,608 markers to achieve whole genome coverage at a 75 kilobase (kb) spacing. It additionally covers more than 400 targeted regions, including known recurrent microdeletion / microduplication syndromes, centromere and telomere regions and disease-causing genes.

At least 50% of first trimester miscarriages are caused by a chromosomal imbalance. Chromosomal microarray analysis of uncultured Products Of Conception (POC) samples increases the likelihood of detecting clinically significant genetic imbalances as compared to Conventional G-banded analysis.

Clinical Indication

The ChromoTouch SNP Array POC is warranted for the evaluation of any spontaneous pregnancy loss and can provide a diagnosis and recurrence risk for future pregnancies.

Affymetrix Microarrays for enhanced detection of chromosomal abnormalities

Choosing ChromoTouch® POC SNP microarray

- Tissue culture failure is avoided with the use of DNA extracted from uncultured cells, rather than cultured cells.
- Detects triploidy, trisomy, monosomy, chromosome deletions and duplications.
- This test is a cost effective method to detect chromosomal imbalances, which is important to determine the recurrence risk for future pregnancies.
- Chromosomal microarray analysis of uncultured Products Of Conception (POC) samples increases the likelihood of detecting clinically significant genetic imbalances as compared to conventional G-banded analysis.

AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS (ACOG) RECOMMENDATION 2013

The American College of Obstetricians and Gynecologists (ACOG) issued a committee opinion on the use of chromosomal microarray analysis in prenatal diagnosis, which provided the following practice recommendations to replace those set in 2009:

- Chromosomal Microarray Analysis (CMA) is recommended for any patient, undergoing an invasive diagnostic prenatal procedure because of the ultrasound indication of one or more major structural anomalies in the fetus. CMA replaces the need for fetal karyotype.
- CMA or Karyotype can be offered in those patients, undergoing invasive diagnostic prenatal testing if no structural fetal abnormality is noted on ultrasound regardless of maternal age.