

## Pregnancy loss analysis

### Genetic testing can provide answers to your patients' hardest question: why?

Chromosomal microarray analysis for pregnancy loss can help you and your patients find a path forward by determining whether a recurrent miscarriage, intrauterine fetal demise (IUFD), or stillbirth was caused by a chromosome abnormality.

Invitae's chromosomal microarray analysis (CMA) for pregnancy loss is DNA-based and delivers results in more than 92.4% of cases in as soon as 10–12 days. No cell culture is required.

### Why choose Invitae



#### Clinical support

- Invitae's team of experienced genetic counselors is available to help answer your questions and provide support every step of the way.
- Your patients can also call Invitae's genetic counselors with quick questions or schedule a full post-test genetic counseling session to better understand their results.



#### Reliable results

- Invitae's microarray analysis for pregnancy loss delivers results in more than 92.4% of cases.



#### Flexible sample options

- In cases where collecting a fresh tissue sample is not an option, Invitae accepts formalin-fixed, paraffin-embedded (FFPE) samples.
- Cell cultures are not required.
- Analysis provides simultaneous detection of maternal cell contamination without a maternal blood sample.



#### Superior coverage

Invitae technology:

- provides clinically-focused, genome-wide coverage
- readily detects triploidy and molar pregnancies
- helps prevent unnecessary testing
- allows for appropriate medical management and recurrence risk counseling



#### Expert interpretation

- Invitae's scientists and laboratory directors have decades of experience in interpreting microarray data and are available to assist you in understanding complex results.

Approximately one in five clinically recognized pregnancies ends in a loss. Of first-trimester pregnancy losses, more than 50% are due to a fetal chromosomal abnormality.

## Microarray vs. karyotyping

	Invitae microarray	Karyotyping
Percentage of cases where results are obtained	>92.4% <sup>1</sup>	60–80% <sup>1-3</sup>
Cell culture required	No (DNA-based)	Yes (frequent cell culture failure)
Can be performed on formalin-fixed, paraffin-embedded (FFPE) samples?	Yes	No
Detects submicroscopic gains and losses	Yes	No
Detects submicroscopic imbalances and molar pregnancy	Yes	No
Detects maternal cell contamination (MCC)	Yes	No
Turnaround time	10–12 days on average	≥ 2 weeks (if culture is successful)

## How it works

### Easy ordering

1. Request a free specimen collection kit at [www.invitae.com/request-a-kit](http://www.invitae.com/request-a-kit).
2. Order a test using a paper test requisition form. Find forms at [www.invitae.com/forms](http://www.invitae.com/forms).
3. Receive a comprehensive report of results in as soon as 10–12 days.

## Hassle-free billing

### Insurance

Invitae is proud to be in **network for over 250 million patients** and will work directly with your patient's insurance company to coordinate coverage and payment.

### Financial assistance

For patients without adequate coverage through insurance, we offer patient-pay pricing and a financial assistance program.

## Hands-on support

### For clinicians

Call Clinical Consult at **800-436-3037** to review patient cases, learn more about the differences between Invitae's testing options, discuss results, or to get help with ordering and billing.

### For patients

For billing and insurance-related questions, patients can contact Client Services at [clientservices@invitae.com](mailto:clientservices@invitae.com).

For questions about genetic testing and test results, patients can talk to one of Invitae's genetic counselors by calling 800-436-3037, Monday through Friday, 5:00 am to 5:00 pm Pacific.

For more information visit: [www.invitae.com/clinical-support-services](http://www.invitae.com/clinical-support-services).

Genetic testing for pregnancy loss is performed at Invitae's laboratory in Irvine, California, previously home to CombiMatrix, which was acquired by Invitae in 2017.

#### References:

1. Sahoo T et al. Comprehensive genetic analysis of pregnancy loss by chromosomal microarrays: outcomes, benefits, and challenges. *Genet Med*. 2017;19(1):83-9.
2. Warren JE et al. Array comparative genomic hybridization for genetic evaluation of fetal loss between 10 and 20 weeks of gestation. *Obstet Gynecol*. 2009;114(5):1093-102.
3. Ljunger E et al. Chromosomal anomalies in first-trimester miscarriages. *Acta Obstet Gynecol Scand*. 2005;84:1103-7.