



What is POC?

The POCscreen test offered by Next Biosciences employs next generation sequencing (NGS) technology to rapidly and accurately screen products of conception for abnormal chromosome numbers, and large genetic deletions and/or duplications of chromosomal material.

>20%¹

>20% of pregnancies end in miscarriage

>50%¹

>50% of losses are due to chromosome abnormalities

Benefits of POC?

- Fast result turnaround time (7-10 working days)
- No need for cell culturing resulting in low test failure rate
- Test is done on NGS technology which has a higher resolution to conventional karyotype
- Allows for the detection of all chromosomes as well as large duplications and deletions
- High resolution NGS can accurately detect certain unbalanced translocations >10Mb
- Pick up rate of approximately 50%²

Indications

POCScreen is suitable for couples who have suffered a pregnancy loss, especially those who have had recurrent miscarriages.

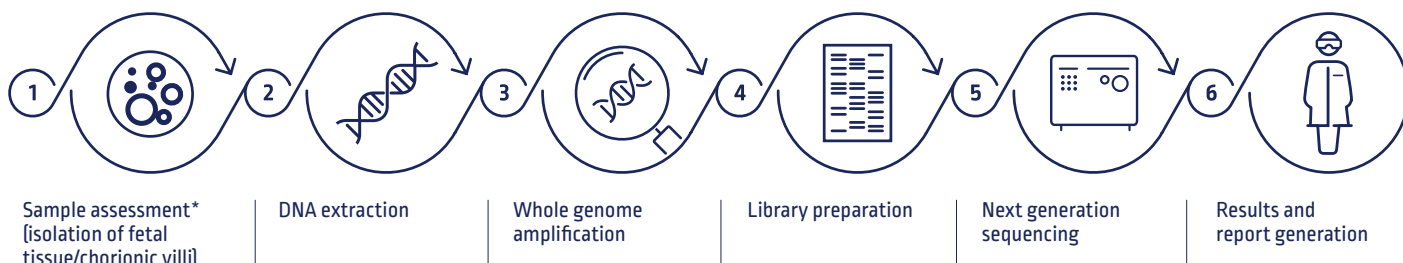
Although many chromosomal anomalies that cause miscarriages are sporadic and have a low recurrence risk, some anomalies (such as translocations) are expected to significantly increase the risk of recurrence- which may necessitate parental karyotyping.

Technology

Next Biosciences uses next generation sequencing (NGS) to rapidly and accurately screen Products of Conception (POC) for chromosomal anomalies.

- >99% diagnostic accuracy
- >99% analytical specificity³
- >98% analytical sensitivity³
- 99.9% success rate⁴
- Detects all chromosomes (1-22, X&Y)
- Accurately detect certain unbalanced translocations
- Can detect certain triploids and polyploids

Methodology



Ordering POCscreen

1. Complete the POCscreen **Test Requisition Form**.
2. **Collect the specimen** in saline in an appropriate specimen jar (sample can be kept at room temperature or at fridge temperature).
3. **Call the client services** team to arrange collection: **011 697 2905**
4. Turnaround time for results is **7-10 working days** from receipt of sample.



POCScreen Procedure Codes

Description	ICD10	Traffic Code
Cytogenetic Analysis: Chronic Tissue	Z36.0	4755
DNA Extraction: Chronic Tissue	Z36.0	4767
Prenatal PCR Chronic Tissue	Z36.0	4769

References

1. Choi TY, Lee HM, Park WK, Jeong SY, Moon HS. Spontaneous abortion and recurrent miscarriage: A comparison of cytogenetic diagnosis in 250 cases. *Obstet Gynecol Sci.* 2014 Nov;57(6):518-525.
2. Teles, T.M.A., Paula, C.M.M.D., Ramos, M.G., Costa, H.B., Andrade, C.R.A., Coxir, S.A. and Penna, M.L.F., 2017. Frequency of chromosomal abnormalities in products of conception. *Revista Brasileira de Ginecologia e Obstetrícia*, 39(3), pp.110-114.
3. Internal Validation Report (unpublished data)
4. Internal Next Genetics Data