

Genie-A Solution

To detect CNV, ploidy, Sibling QC and ROH in
preimplantation embryo biopsy samples



Comprehensive detection

A single solution to detect CNV, Ploidy, Sibling QC and ROH (Regions of Homozygosity)

Default SNP analysis

Genie-A uses Genome-wide SNP information to detect Ploidy, Sibling QC and ROH

High Resolution

$\geq 4\text{Mb}$ CNVs (unknown), and $\geq 1\text{ Mb}$ inherited CNVs (known)

High throughput and Scalability

5M reads/sample, up to 96 samples/run, 1 x 100 bp reads.
Sequencers: Genie Sequencer and DNBSEQ-G400



Genie-A Fast: Fast workflow, combining WGA and library preparation to reduce cost and time.

Genie-A Advanced: Separate WGA (MDA) followed by a patented library preparation method to support wider genome coverage.

Two versions of Genie-A kits with different sample preparation methods for greater flexibility, but with the same outcome.

Genie-A Kits	Amplification method	Sequencers	Reporting content
Genie-A Fast	PicoPlex	Genie Sequencer DNBSEQ-G400*	- Aneuploidy, Triploidy,Haploidy ≥4Mb CNVs in unknown regions ≥1Mb known inherited CNVS - Mosaicism ≥30% C ≥10Mb - Whole chromosome level ROH - Sibling QC
Genie-A Advanced	MDA		

Competitive Pricing

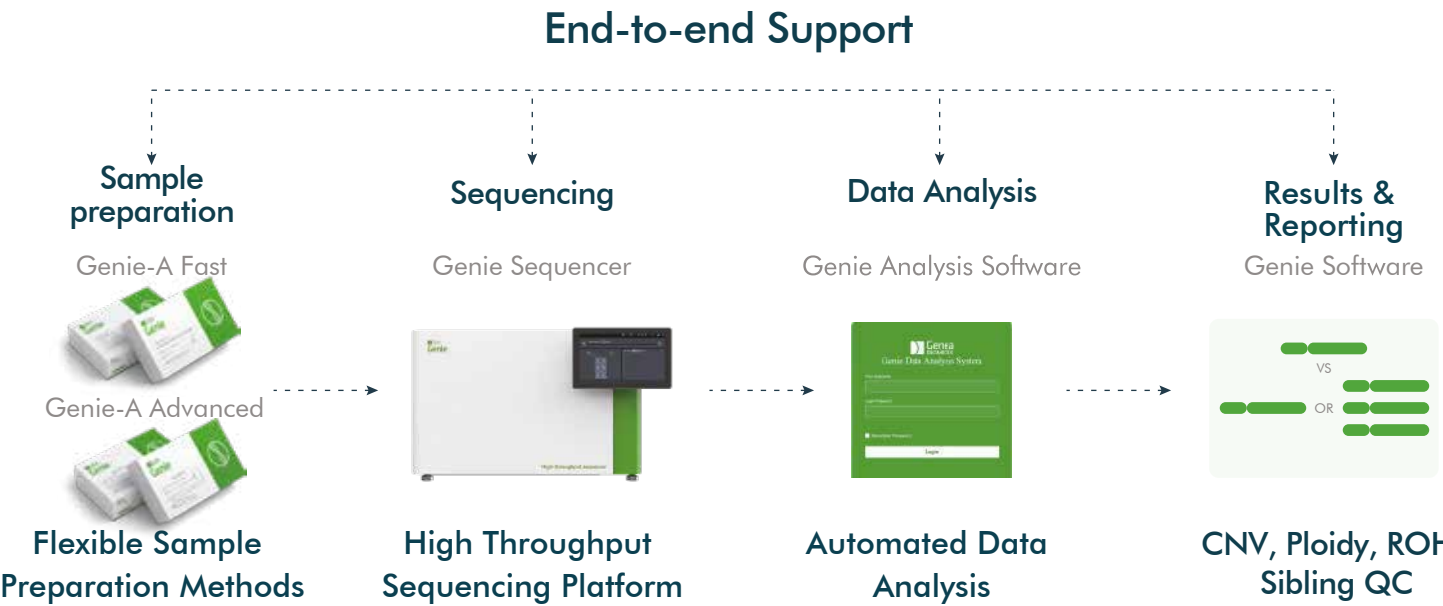
Offering significant cost savings without compromising on quality

Accurate detection of CNVs

5M reads/sample combined with CBS algorithm provides accurate detection of CNVs

Supports Localised Deployment

Compatible with various devices and capable of quick report generation



Genie-Plus Solution

A single test for pre-implantation genetic testing
of embryo biopsy samples



Comprehensive genetic testing

A single solution for the detection of CNV, Ploidy, Sibling QC, ROH, structural rearrangements and linkage analysis

Genome-wide coverage

WGA by MDA and a patented library preparation method for better whole-genome coverage

High Resolution

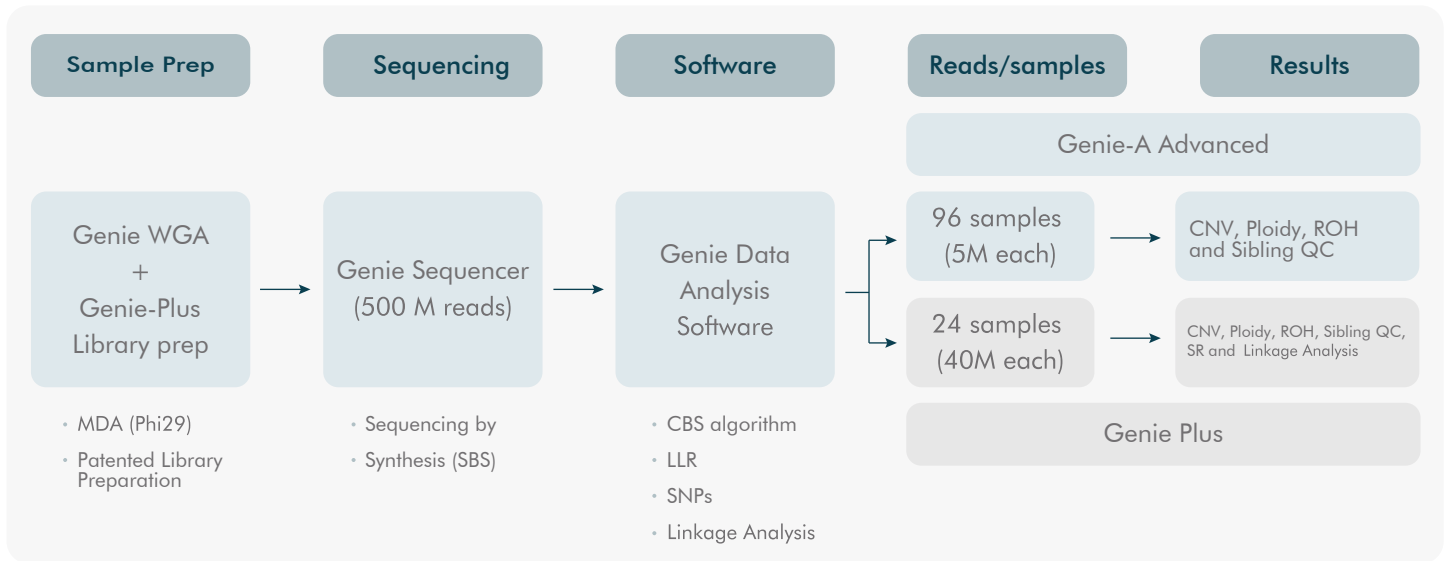
$\geq 4\text{Mb}$ CNVs (unknown), and $\geq 1\text{ Mb}$ inherited CNVs (known)

High throughput and Scalability

20M paired-end reads/sample, up to 96 samples/run, 2x 100 bp reads: Genie Sequencer and DNBSEQ-G400



Genie Plus: A Single workflow for genetic testing of preimplantation embryo biopsies



Competitive Pricing

Offering significant cost savings without compromising on quality

Patented Library Prep

Better genome coverage, need only 1/10th of 30x WGS data

Supports Localised Deployment

Compatible with various devices and capable of quick report generation

End-to-end Support

