

Lab Genomics Laboratory Services meets your needs by using state of the art automated genetic testing to provide preventative, predictive & personalized medicine. Our goal is to provide physicians and patients with the most accurate and comprehensive genetic information available so they can make well- informed health-care decisions. With a combination of cutting edge technology and top-notch customer service, Lab Genomics is focused on delivering a suite of unmatched molecular diagnostic services.

Lab genomics state of the art technology includes Next Gen Sequencing. With 3 cell DNA amplification

False Positive and False Negative rate is less than 0.1%. Next Gen sequencing screens 24 chromosome for aneuploidy. System has quality Control in place. NGS provides reliable, comprehensive screening of 24 chromosome aneuploidy, achieving results with high degree of concordance to those obtained using array based PGS techniques. NGS method for PGS offers enhanced precision. Lab genomics PGS delivers leading DATA quality.

Data Set	Positive % Agreement	Negative % Agreement
Overall	97.8% (n=139)	99.8% (n = 3677)
Single-cell Samples	96.0% (n=50)	99.6% (n=1630)
Three-cell Samples	98.9% (n=89)	99.9% (n=2047)

Turnaround Time for final report is 5 business days.

References

1. Scott RT Jr, Ferry K, Su J, Tao X, Scott L, et al. (2012) Comprehensive chromosome screening is highly predictive of the reproductive potential of human embryos: a prospective, blinded, nonselection study. *Fertil Steril* 97(4): 870-875.
2. Tobias E, Connor JM, Ferguson-Smith (2011) *Essential medical genetics*. 6th edition: 243-247. Chichester, West Sussex, UK. Wiley-Blackwell.
3. Yang Z, Liu J, Collins GS, Salem SA, Liu X, et al. (2012) Selection of single blastocysts for fresh transfer via standard morphology assessment alone and with array CGH for good prognosis IVF patients: results from a randomized pilot study. *Mol Cytogenet* 5(1): 24.
4. Handyside AH (2013) 24 chromosome copy number analysis: a comparison of available technologies *Fert Steril* 100(3): 595-602.
5. Fiorentino F, Biricik A, Bono S, Spizzichino L, Cotroneo E, et al. (2014) Development and validation of a next-generation sequencing-based protocol for 24-chromosome aneuploidy screening of embryos. *Fertil Steril*. 101(5)1375-1382.
6. Fiorentino F, Biricik A, Bono S, Spizzichino L, Cotroneo E, et al. (2014) Application of next-generation sequencing technology for comprehensive aneuploidy screening of blastocysts in clinical preimplantation genetic screening cycles. *Hum Reprod* 29(12): 2802-2813.
7. Sample I. IVF technique that tests embryos for genetic disorders has first success. *The Guardian*. <http://www.theguardian.com/society/2014/jul/28/ivf-genetic-disorder-check-first-pregnancy-embryo-london>. Published July 27, 2014. Accessed October 1, 2014.